

GENITOURINARY MEDICINE

Editor: A Mindel

President MSSVD: M Waugh

Hon Sec MSSVD: M Godley

Assistant Editor: C A Carne

Assistant Editor, Abstracts: C Sonnex

G Bird
L Corey
R A Coutinho
B A Evans
D J Jeffries
F Judson
C J N Lacey
J M A Lange

A G Lawrence
A Méheus
R S Pattman
P Piot
M Stanley
D Taylor-Robinson
I V D Weller
L Weström

H Young
A J Zuckerman
H zur Hausen

Editor
British Medical Journal

Technical Editor: Kenneth Till

This *Journal*, founded by the Medical Society for the Study of the Venereal Diseases, publishes original work on the investigation and treatment of genitourinary and allied disorders, and review articles, correspondence, and abstracts.

Advice to authors Papers for publication, which will be accepted on the understanding that they have not been and will not be published elsewhere and are subject to editorial revision, should be sent in duplicate to Dr A Mindel, Academic Department of Genitourinary Medicine, James Pringle House, Middlesex Hospital, London W1N 8AA. All authors must give signed consent to publication. Submitted papers must be accompanied by the following statement, signed by all the authors: "No paper resembling the enclosed article has been or will be published except in *Genitourinary Medicine*. We transfer all copyright ownership to *Genitourinary Medicine*." Manuscripts will only be acknowledged if a stamped addressed postcard or international reply coupon is enclosed. Rejected papers will not be returned. Figures will be returned if requested at the time of submission.

Full details of requirements for manuscripts in the Vancouver style (*BMJ* 1982;284:1766-70) are given in *Uniform requirements for manuscripts submitted to biomedical journals*, available from the Publishing Manager, *British Medical Journal*, BMA House (50p post free). Briefly details are as follows:

(1) *Scripts (including correspondence and book reviews)* must be typewritten on one side of the paper in double spacing with ample margins. Two copies should be sent.

(2) *Each script* should include, in the following order: a brief summary (structured summaries are preferred), typed on a separate sheet, outlining the main observations and conclusions; the text divided into appropriate sections; acknowledgements; references; tables, each on a separate sheet; and legends for illustrations.

(3) *The title* of the paper should be as brief as possible.

(4) *The number of authors* should be kept to the minimum, and only their initials and family names used.

(5) *Only the institution(s)* where work was done by each author should be stated.

(6) *SI units* must be used. If old fashioned units are used, SI units should be given in parentheses or, for tables and figures, a conversion factor given as a footnote.

(7) *Only recognised abbreviations* should be used.

(8) *Acknowledgements* should be limited to workers whose courtesy or help extended beyond their paid work, and supporting organisations.

(9) *Figures* should be numbered in the order in which they are first mentioned in the text. Captions should be typed on a separate sheet. (*Diagrams*: use thick, white paper and insert lettering lightly in pencil. *Photographs*: should be marked lightly on the back with the author's name and indicating the top, and should not be attached by paper clips or pins. They should be trimmed to include only the relevant section (and will be reproduced 68 or 145 mm wide) to eliminate the need for reduction. Photomicrographs must have internal scale markers. Radiographs should be submitted as photographic prints, carefully prepared so that they bring out the exact point to be illustrated.

(10) *Tables* should be numbered, have titles, and be typed on separate sheets. Please avoid large tables and use the format which appears in current issues.

(11) *References* should be numbered consecutively the first time they are cited and identified by arabic numbers in the text, tables, and legends to figures. Authors must take full responsibility for the accuracy of their references, and the list should be kept as short as practicable. It should be in the order in which references are first mentioned, and should include (in the following order), *journals*: author's name and initials, title of paper, name of journal (in full or abbreviated according to the list in *Index Medicus*), year of publication, volume number, and first and last page numbers; *books*: author's name and initials, full title, edition, place of publication, publisher, and year of publication. When a chapter in a book is referred to, the name and initials of the author of the chapter, title of the chapter, "In:", name and initials of the editor, and "ed" should precede book title, etc as above. In references to journals or books, when there are seven or more authors the names of the first three should be given followed by "*et al.*" Names of journals no longer published or not in *Index Medicus* should be given in full — for example, *British Journal of Venereal Diseases*.

Proofs Contributors receive one proof, and should read it carefully for printers' errors and check the tables, figures, legends, and any numerical, mathematical, or other scientific expressions. Alterations should be kept to a minimum.

Reprints A limited number of reprints may be ordered at cost from the Publishing Manager when the proofs are returned.

Notice to subscribers This *Journal* is published bimonthly. The annual subscription rates are £95.00 inland, £101.00 overseas, and \$169 in the USA. Subscribers may pay for their subscriptions by Access, Visa, or American Express by quoting on their orders the credit or charge card preferred, the appropriate personal account number, and the expiry date of the card. Orders should be sent to the Subscriptions Manager, *Genitourinary Medicine*, BMA House, Tavistock Square, London WC1H 9JR. Orders can also be placed locally through any leading subscription agent or bookseller. (For the convenience of readers in the USA, subscription orders, with or without payment, can be sent to: *British Medical Journal*, Box 560B, Kennebunkport, Maine 04046. All inquiries, however, including those regarding air mail rates and single copies already published, should be addressed to the publisher in London.)

Second class postage paid, Rahway NJ Postmaster. Send address changes to: *Genitourinary Medicine* c/o Mercury Airfreight International Ltd Inc, 2323 Randolph Avenue, Avenel, NJ 07001, USA.

Notice to advertisers Applications for advertisement space and for rates should be addressed to the Advertisement Manager, *Genitourinary Medicine*, BMA House, Tavistock Square, London WC1H 9JR.

Copyright © 1991 by *Genitourinary Medicine*. This publication is copyright under the Berne Convention and the International Copyright Convention. All rights reserved. Apart from any relaxations permitted under national copyright laws, no part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means without the prior permission of the copyright owners. Permission is not, however, required to copy abstracts of papers or of articles on condition that a full reference to the source is shown. Multiple copying of the contents of the publication without permission is always illegal.

Fear can be useful provided that five basic requirements are met. Chief among these is that "specific actions or behaviour to address the risk need to be recommended and people need to believe they can effectively implement the action or behaviour". This behaviour should then reduce the level of fear, and this should be felt as a reinforcement for the recommended behaviour.

Fear arousal has also been studied in the context of small groups and in one-to-one prevention programmes. Fear or anxiety-producing motivations work most often on people who are realistic about evaluating risks. These people are called copers. People who tend not to see or to deny a given risk are called avoiders. Fear generally doesn't work with them. Unfortunately, copers don't often enter into high-risk situations and avoiders do. So the avoiders, who are more likely to practice unsafe sex or share IV needles, do not respond well to fear messages. The discussion goes on to show why fear may in fact promote the unsafe practice, such as drug use, as a means of reducing this fear. On the positive side, Jo Kenny, from the Santa Cruz AIDS Project describes how humour can be useful when discussing sex and sexuality.

The workshops focus on different groups in society—for example, prostitutes, STD patients, IV drug users. Predictably a number of the sections draw attention to our lack of knowledge in these areas and the need for further research. At times this can be rather frustrating as the reader craves more in the way of solutions and suggested methods. To this end I was grateful that most of the presentations and workshops finished with a list of conclusions. Most of the sections are also well referenced so that this book could serve as a useful introduction to this difficult and under-researched field.

CHRIS CARNE

Roses in December. By Sydney M Laird. Braunton, Devon: Merlin Books Limited. (10 line drawings; 13 photographs. Pp 391; £13.95). 1990. ISBN 0-86303-518-3

Sydney Laird was brought up in his

father's practice at Kilmacolm. He developed a warm interest in people, growing concern with history and archaeology, and the Scottish love and respect for learning. These led him to Medicine and to stay in Venereology.

After a happy and active professional and family life he was devastated by the development of progressive macular dystrophy, by being placed on the Register of Blind Persons, being unable to read, to practise medicine, to follow hobbies or to drive. He overcame depression by typing his autobiography of which this is the second volume. It was a joint collaborative work with his doctor-wife Gwen because he could type, but not read even what he had typed.

In 1941 while an Army Major at Colchester, he very unusually took over civil clinics at Ipswich and Bury St Edmunds to facilitate his army work. Each centre that this doctor with wide interests worked at or visited is put in context with an attractive and discerning review of the development of the area and hospital, its present state and staff. For Ipswich he describes the Romans sailing up the Orwell, John le Blake who in 1271 made off with the original Domesday documents, and the first line-drawing shows the "Ancient House" in Butter Market.

On his second day at the East Suffolk and Ipswich Hospital he saw the redoubtable Secretary Arthur Griffiths. The list of alterations merited "I agree" and work was started next day. The request for filing cabinets was met with the address of a shop in Westgate Street, the bill to be sent to the Secretary. Administration is analysed here and later. He writes of the vital divorce of Dermatology from Venereology pioneered by RMB Mackenna.

His interest in people has led to perceptive accounts of staff at Ipswich and at each centre that he went to.

The second line-drawing is of King's College, Cambridge from the Backs near where he ate his packed lunch with enjoyment on sunny days. At Addenbrooke's tea with the Hospital Secretary was served on a silver tea service because he was a consultant. Acceptance came when his small waiting room was packed with large men of the Rugby team, just back from their tour of the Far East, coming for a check-up.

His interest in people led to staff

becoming valued colleagues. So at Ipswich Sister Irene Smith came for three months, stayed, and later went on the WHO project in Ceylon and then to the Manchester Royal Infirmary.

Characteristically the account of Manchester Royal Infirmary includes mention of Dr Roget (of Thesaurus fame) as well as later staff. Accounts are given of prostitution, male homosexuality, education of the general public and of school children. His own Penguin Special ("Venereal Diseases in Britain") had broken new ground in 1943. Descriptions of disease are brief and clear. He gives an account of blindness.

His last appointment in Bournemouth leads him to talk of Committees. Their cost must include their power for delaying improvement. The Salmon Committee was a disaster for all.

This book will particularly interest all working in sexually transmitted disease; anyone in East Anglia (notably at Ipswich or Addenbrooke's Hospitals), in the Bournemouth area or at the Manchester Royal Infirmary. It is perceptive, a delight to read and a major achievement.

EMC DUNLOP

NOTICES

An International Course (BMC Summer Course) on "Tools in Research on Sexually Transmitted Diseases" (STDs, incl HIV/AIDS) will be held at Uppsala University, Sweden, on 14–25 August 1991. The course will be arranged in close collaboration with *WHO Coll Center for STDs and their Complications* and *Centre for STD Research* at Uppsala University. The course includes the following topics: epidemiological study tools, design and evaluation of aetiological, clinical and therapeutic studies, biostatistics, computer models, vaccine development, prevention and ethics. Participants will also take part in working groups on different topics. The faculty

will be international. Participants in the course will also be able to attend a 2-day symposium on "Diagnosis of Sexually Transmitted Diseases" (see separate announcement).

Further information can be obtained from Prof P-A Mårdh, Inst of Clin Bacteriology, Box 552, S-751 22 Uppsala, Sweden. Fax: +46 18 557301.

An International Symposium on "Diagnosis of Sexually Transmitted Diseases" (including HIV/AIDS) will take place in Uppsala, Sweden, on 16–17 August, 1991. The Symposium is arranged by *Uppsala University Centre for STD Research* in close collaboration with *WHO Coll. Centre for STDs and their Complications*. Optimised diagnosis in different syndromes, needs and possibilities of aetiological diagnosis of STDs performed in various types of clinical settings in developed and developing countries, new laboratory techniques and their role in routine health care, diagnosis of infections by bacteria, chlamydiae, spirochetes and viruses known to cause STDs, are all topics covered. Immunological investigations of the genital tract and immunology in HIV infections are still other topics.

Further information can be obtained from Professor P-A Mårdh, Institute of Clinical Bacteriology, Box 552, S-751 22 Uppsala, Sweden. Fax: +46 18 557301.

tion may be booked through the Congress Secretariat before 1 March 1991 at either Worcester College for £46·00 per night including VAT or St John's College for £24·15 per night including VAT. Registration fees differ for MSSVD/ISSVD members.

Congress Secretariat Address: Conference Associates & Services Limited—ISSVD, Congress House, 55 New Cavendish Street, London W1M 7RE. Telephone: 44-71-486 0531 Telefax: 44-71-935 7559.

Registration fees

Delegate

Before 1 June 1991: £75·00

After 1 June 1991: £85·00

MSSVD/ISSVD Fellow

Before 1 June 1991: £50·00

After 1 June 1991: £60·00

International Society for the Study of Vulvar Disease (ISSVD) and the Medical Society for the Study of Venereal Diseases (MSSVD) study day 27 September 1991

A Study Day is being held by the ISSVD and the MSSVD at the Randolph Hotel, Oxford, on 27 September 1991. The speakers will be drawn from both Societies and the subjects will range over topics of common interest. Lunch and refreshments will be provided. For those who wish to extend their stay, college accommoda-

CURRENT PUBLICATIONS

Selected titles from recent reports published worldwide are arranged in the following sections:

Gonorrhoea
Chlamydia
Pelvic inflammatory disease
Non-specific genital infection
Bacterial vaginosis
Syphilis and other treponematoses
Herpes simplex virus
Human papillomavirus infection
Cervical cytology and colposcopy
Other sexually transmitted diseases
Public health and social aspects
Miscellaneous

Gonorrhoea

Gonorrhoea

FN JUDSON, *Med Clin N Am* 1990;74:1353.

Resurgent gonorrhoea in homosexual men

VC RILEY, *Lancet* 1991;337:183.

Evidence of gonococcal transmission within a correctional system

KH VANHOEVEN, WC ROONEY, SC JOSEPH, *Am J Public Health* 1990;80:1505.

The evolutionary watershed of susceptibility to gonococcal infection

ZA MCGEE, CR GREGG, AP JOHNSON, SS KALTER, D TAYLOR ROBINSON, *Microbiol Path* 1990;9:131.

Pathogenic *Neisseriae*—a model of bacterial virulence and genetic flexibility

TF MEYER, *Zentralblatt Bakt-Int J Med Microbiol* 1990;274:135.

4-Quinolone-resistant *Neisseria gonorrhoeae* in the United Kingdom

WR GRANSDEN, C WARREN, I PHILLIPS, *J Med Microbiol* 1991;34:23.

Penicillin-resistant *Neisseria gonorrhoeae* in low prevalence areas—implications for cost-effective management

MD NETTLEMAN, V SMITH, NP MOYER, *Sex Transm Dis* 1990;17:175.

Penicillinase-producing *Neisseria gonorrhoeae* strains in East Black Sea region of Turkey

I KOKSAL, G OZGUR, B PISKIN, *Infection* 1990;18:396.

Interpretive criteria, quality control guidelines and drug stability studies for susceptibility testing of cefotaxime, cefoxitin, ceftazidime and cefuroxime against *Neisseria gonorrhoeae*

RN JONES, PC FUCHS, JA WASHINGTON, TL GAVAN, PR MURRAY, EH GERLACH, C THORNSBERRY, *Diag Microbiol Infect Dis* 1990;13:499.

Treatment of uncomplicated gonococcal urethritis with single-dose cef-tizoxime

AMB GOLDSTEIN, JH CLARK, *Sex Transm Dis* 1990;17:181.

Control of pilus expression in *Neisseria gonorrhoeae* as an original system in the family of two-component regulators

MK TAHA, B DUPUY, W SAURIN, M SO, C MARCHAL, *Mol Microbiol* 1991;5:137.

Chlamydia

Chlamydial infections

DH MARTIN, *Med Clin N Am* 1990;74:1367.

Chlamydia trachomatis infection in late pregnancy and in neonates

G STERNER, E ENOCKSSON, C BRIHMERWALLDE, I KALLINGS, *Scand J Infect Dis* 1990;S70:95.

Chlamydia infections in gynaecology

JH SUCHET, *Presse Medicale* 1991;20:10.

Prevalence of Chlamydia trachomatis infection in women having cervical smear tests

JR SMITH, J MURDOCH, D CARRINGTON, CE FREW, AJ DOUGALL, H MACKINNON, D BAILLIE, DM BYFORD, CA FORREST, JA DAVIS, *Br Med J* 1991;302:82.

Derivation and validation of a clinical diagnostic model for Chlamydial cervical infection in university women

BA JOHNSON, RM POSES, CA FORTNER, FA MEIER, HP DALTON, *JAMA* 1990;264:3161.

Diagnostic value of the polymerase chain reaction for chlamydia detection as determined in a follow-up study

HCJ CLAAS, JHT WAGENVORST, HGM NIESTERS, TT TIO, JH VANRIJSOORTVOS, WGV QUINT, *J Clin Microbiol* 1991;29:42.

Detection of Chlamydia trachomatis in clinical specimens by the polymerase chain reaction

HC CLAAS, WJ MELCHERS, IH DEBRVIJN, M DEGRAAF, WC VANDIJK, J LINDEMAN, WG QUINT, *Eur J Clin Microbiol Infect Dis* 1990;9:864.

Current problems in microbiology. 1. Chlamydial infections—which laboratory test?

GL RIDGWAY, D TAYLOR ROBINSON, *J Clin Pathol* 1991;44:1.

Rapid, on-site diagnosis of Chlamydial urethritis in men by detection of antigens in urethral swabs and urine

J SELLORS, J MAHONY, D JANG, L PICKARD, S CASTRICIANO, S LANDIS, I STEWART, W SEIDELMAN, I CUNNINGHAM, M CHERNESKY, *J Clin Microbiol* 1991;29:407.

Chlamydial trachomatis in chronic abacterial prostatitis—demonstration by colorimetric in situ hybridization

OMA ABDELATIF, FW CHANDLER, BS MCGUIRE, *Hum Pathol* 1991;22:41.

Comparison of ofloxacin with doxycycline in the treatment of non-gonococcal urethritis and cervical chlamydial infection

VS KITCHEN, C DONEGAN, H WARD, B THOMAS, JRW HARRIS, D TAYLOR ROBINSON, *J Antimicrob Chemother* 1990;26:99.

Double-blind, placebo-controlled study of three-month treatment with lymecycline in reactive arthritis, with special reference to chlamydia arthritis

M CUTOLO, E BALLEARI, M GIUSTI, E INTRA, S ACCARDO, *Arthritis Rheum* 1991;34:1.

Partial characterization of Chlamydia trachomatis isolates resistant to multiple antibiotics

RB JONES, B VANDERPOL, DH MARTIN, MK SHEPARD, *J Infect Dis* 1990;162:1309.

Interferon-gamma in endocervical secretions of women infected with Chlamydia trachomatis

JN ARNO, VA RICKER, BE BATTEIGER, BP KATZ, BA CAINE, RB JONES, *J Infect Dis* 1990;162:1385.

Pelvic inflammatory disease

Pelvic inflammatory disease

HB PETERSON, EI GALAID, W CATES, *Med Clin N Am* 1990;74:1603.

Sexually transmitted diseases, pelvic inflammatory disease, and infertility—an epidemiologic update

W CATES, RT ROLFS, SO ARAL, *Epidemiologic Rev* 1990;12:199.

Type of oral contraceptive in relation to acute, initial episodes of pelvic inflammatory disease

LA PANSER, WR PHIPPS, *Contraception* 1991;43:91.

The accuracy of clinical findings and laparoscopy in pelvic inflammatory disease

J SELLORS, J MAHONY, C GOLDSMITH, D RATH, R MANDER, B HUNTER, C TAYLOR, D GROVES, H RICHARDSON, M CHERNESKY, *Am J Obstet Gynecol* 1991;164:113.

Relationship of laparoscopic findings to self-report of pelvic pain

AL STOUT, JF STEEGE, WC DODSON, CL HUGHES, *Am J Obstet Gynecol* 1991;164:73.

Single-agent therapy for acute pelvic inflammatory disease—sulbactam/ampicillin versus cefoxitin

DL HEMSELL, RE BAWDON, PG HEMSELL, BJ NOBLES, MC HEARD, *J Int Med Res* 1990;18:D85.

Non-specific genital infection

Approach to men with urethritis and urologic complications of sexually transmitted diseases

WR BOWIE, *Med Clin N Am* 1990;74:1543.

Isolation of *Bacteroides ureolyticus* from the genital tract of men with or without non-gonococcal urethritis

KW BENNETT, A ELEY, PD WOOLLEY, BI DUERDEN, *Eur J Clin Microbiol Infect Dis* 1990;9:825.

Microbiological study of urethritis in men attending a STD clinic

A PILLAI, L DEODHAR, A GOGATE, *Indian J Med Res-A* 1990;91:443.

Polymerase chain reaction for detection of mycoplasma genitalium in clinical samples

JS JENSEN, SA ULDUM, J SONDERGARDANDERSON, J VUUST, K LIND, *J Clin Microbiol* 1991;29:46.

Bacterial vaginosis

Endotoxin in vaginal fluid of women with bacterial vaginosis

I SJOBERG, S HAKANSSON, *Obstet Gynecol* 1991;77:265.

Tea tree oil and anaerobic (bacterial) vaginosis

AL BLACKWELL, *Lancet* 1991;337:300.

Syphilis

Syphilis in adults

CM HUTCHINSON, EW HOOK, *Med Clin N Am* 1990;74:1389.

Evaluation and treatment of congenital syphilis

MK IKEDA, HB JENSON, *J Pediatr* 1990;117:843.

Sensitive detection of *Treponema pallidum* by using the polymerase chain reaction

JM BURSTAIN, E GRIMPEL, SA LUKEHART, MV NORGARD, JD RADOLF, *J Clin Microbiol* 1991;29:62.

Effects of human immunodeficiency virus (HIV) infection on the course of syphilis and on the response to treatment

DM MUSER, RJ HAMILL, RE BAUGHN, *Ann Int Med* 1990;113:872.

Syphilis—a reversible cause of nephrotic syndrome in HIV infection

DJ KUSNER, JJ ELLNER, *N Engl J Med* 1991;324:341.

The syphilis epidemic in Connecticut—relationship to drug use and prostitution

TA FARLEY, JL HADLER, RA GUNN, *Sex Transm Dis* 1990;17:163.

The histology of syphilis—Lues-Con-nata

M BERGMANN, C BERNHARD, G FRAUENDIENSTEGGER, HK MULLERHERMELINK, *Pathologie* 1991;12:40.

Prostaglandins in experimental syphilis—treponemes stimulate spleen cells to secrete prostaglandin-E₂ and indomethacin upregulates immune functions

TJ FITZGERALD, MA TOMAI, GJ TRACHTE, T RICE, *Infect Immun* 1991;59:143.

Median infective dose of *Treponema pallidum* determined in a highly susceptible guinea pig strain

K WICHER, V WICHER, *Infect Immun* 1991;59:453.

Anti-phospholipid antibody profiles of different specificities in syphilis and systemic lupus erythematosus

MY SHIEH, C PIERCE, W BARTHOLOMEW, V KUMAR, *Immunol Invest* 1990;19:507.

Herpes simplex virus

Genital herpes simplex virus infection

GJ MERTZ, *Med Clin N Amer* 1990;74:1433.

Management of women at term with pregnancy complicated by herpes simplex

M FORSGREN, G STERNER, B ANZEN, E ENOCKSSON, *Scand J Infect Dis* 1990;S70:58.

Acyclovir, herpes and pregnancy

P BROCKLEHURST, O CARNEY, K HELSON, G KINGHORN, D MERCEY, A MINDEL, *Lancet* 1990;336:1594.

Culture confirmation and typing of herpes simplex virus isolates from clinical specimens with new monoclonal antibody typing reagents

SLG JOHNSTON, CA GLEAVES, *Serodiag Immunother Infect Dis* 1990;4:295.

Interferon as an agent against herpes simplex virus

M HO, *Invest Dermatol* 1990;95:S158.

Topical treatment of cutaneous herpes simplex virus infections

SL SPRUANCE, DJ FREEMAN, *Antivir Res* 1990;14:305.

The mechanism of the antiherpetic activity of zinc sulphate

G KUMEL, S SCHRADER, H ZENTGRAF, H DAUS, M BRENDLE, *J Gen Virol* 1990;71:2989.

Detection of HSV-1 DNA in patients with Behcet's syndrome and in patients with recurrent oral ulcers by the polymerase chain reaction

M STUDD, DJ MCCANCE, T LEHNER, *J Med Microbiol* 1991;34:39.

Role of antibody-dependent cellular cytotoxicity in defense against herpes simplex virus infections

S KOHL, *Rev Infect Dis* 1991;13:108.

Immune modulation of the natural killer cell cytotoxicity against herpes infected target cells in pregnancy

B GONIK, LC LOFTIN, NS TAN, J CRUMP, *Am J Reprod Immunol* 1990;24:95.

Murine epidermal antigen-presenting cells in primary and secondary T-cell proliferative responses to herpes simplex virus in vitro

NA WILLIAMS, TJ HILL, DC HOOPER, *Immunol* 1991;72:34.

Effect of the estrous cycle on susceptibility of female mice to intravaginal inoculation of herpes simplex virus type-2 (HSV-2)

AG TEEPE, LB ALLEN, RJ WORDINGER, EF HARRIS, *Antivir Res* 1990;14:227.

Characterization of herpes simplex virus type-2 latency-associated transcription in human sacral ganglia and in cell culture

KD CROEN, JM OSTROVE, L DRAGOVIC, SE STRAUS, *J Infect Dis* 1991;163:23.

Intratype variation of herpes simplex virus type-2 isolates detected by monoclonal antibodies against viral glycoproteins

P BHATTARAKOSOL, C YOOSOOK, A CROSS, *Arch Virol* 1990;115:89.

Analysis of the thymidine kinase gene from clinically isolated acyclovir-resistant herpes simplex viruses

PA CHATIS, CS CRUMPACKER, *Virology* 1991;80:793.

Human papillomavirus infection

Human papillomavirus infections of the genital tract

DR BROWN, KH FIFE, *Med Clin N Am* 1990;74:1455.

Anogenital warts in children—clinical and virologic evaluation for sexual abuse

BA COHEN, P HONIG, E ANDROPHY, *Arch Dermatol* 1990;126:1575.

Human immunodeficiency virus-induced immunosuppression—a risk factor for human papillomavirus infection

R MATORRAS, JM ARICETA, A REMENTERIA, J CORRAL, GG DETERAN, F DIEZ, F MONTOYA, FJ RODRIGUEZESCUERO, *Am J Obstet Gynecol* 1991;164:42.

Persistent rectal ulcer associated with human papillomavirus type-33 in a patient with AIDS—successful treatment with isotretinoin

NM AMPEL, ML STOUT, HS GAREWAL, JR DAVIS, *Rev Infect Dis* 1990;12:1004.

Vestibular papillae of the vulva—lack of evidence for human papillomavirus etiology

M MOYALBARRACCO, M LEIBOWITCH, G ORTH, *Arch Dermatol* 1990;126:1594.

Occurrence of multiple types of human papillomavirus in genital tract lesions—analysis by in situ hybridization and polymerase chain reaction

GJ NUOVO, MM DARFLER, CC IMPRAIM, SE BROMLEY, *Am J Pathol* 1991;138:53.

Comparative virologic studies of condylomata acuminata reveal a lack of dual infections with human papillomaviruses

AM BECKMANN, KJ SHERMAN, D MYERSON, JR DALING, JK MCDUGALL, DA GALLOWAY, *J Infect Dis* 1991;163:393.

Genital human papillomavirus infection in female university students as determined by a PCR-based method

HM BAUER, Y TING, CE GREER, JC CHAMBERS, CJ TASHIRO, J CHIMERA, A REINGOLD, MM MANOS, *JAMA* 1991;265:472.

Typing and molecular characterization of human papillomaviruses in genital warts of South African women

JE JOHNSON, CMC DEHAECK, R SOETERS, AL WILLIAMSON, *J Med Virol* 1991;33:39.

Prevalence of human papillomavirus type-16 and type-18 in cervical carcinomas—a study by dot and Southern blot hybridization and polymerase chain reaction

SH LOW, TW THONG, TH HO, YS LEE, T MORITA, M SINGH, EH YAP, YC CHAN, *Japan J Cancer Res* 1990;81:1118.

Carbon dioxide laser treatment for vulvar papillomatosis (vulvodynia)

MI SHAFI, C FINN, DM LUESLEY, JA JORDAN, TP ROLLASON, *Br J Obstet Gynecol* 1990;97:1148.

Treatment of male genital condylomatous lesions by carbon dioxide laser after failure of previous nonlaser methods

A BARAM, M SHILON, MR PEYSER, J OPHIR, S BRENNER, *J Am Acad Dermatol* 1991;24:87.

Interferon-alpha-2b infections used as an adjuvant therapy to carbon dioxide laser vaporization of recalcitrant anogenital condylomata acuminata

JC VANCE, D DAVIS, *J Invest Dermatol* 1990;95:S146.

Therapy of persistent human papillomavirus disease with two different interferon species

SA GALL, L CONSTANTINE, D KOUKOL, *Am J Obstet Gynecol* 1991;164:130.

Treatment of condyloma acuminatum with three different interferon-alpha preparations administered parenterally—a double-blind, placebo-controlled trial

RC REICHMAN, D OAKES, W BONNEZ, *et al*, *J Infect Dis* 1990;162:1270.

The epithelial changes associated with squamous cell carcinoma of the vulva—a review of the clinical, histological and viral findings in 78 women

M LEIBOWITCH, S NEILL, M PELISSE, M MOYALBARRACCO, *Br J Obstet Gynaecol* 1990;97:1135.

Evaluation of two commercially available nucleic acid hybridization assays for the detection and typing of human papillomavirus in clinical specimens

NY BARTHOLOMA, MD ADELSON, BA FORBES, *Am J Clin Pathol* 1991;95:21.

A method for detection of human papillomavirus DNA in stored slides of stained cytologic smears

A SCARPS, G POZZI, E MANFRIN, A LANNUCCI, F BONETTI, R FONTANA, L FIOREDONATI, *Pathol Res Pract* 1990;186:666.

Interphase cytogenetics using biotin and digoxigenin labelled probes. 3. Increased sensitivity and flexibility for detecting HPV in cervical biopsy specimens and cell lines

CS HERRINGTON, AK GRAHAM, JL MCGEE, *J Clin Pathol* 1991;44:33.

Distribution and specific identification of papillomavirus major capsid protein epitopes by immunocytochemistry and epitope scanning of synthetic peptides

PS LIM, AB JENSON, L COWSERT, Y NAKAI, LY LIM, XW JIM, JP SUNDBERG, *J Infect Dis* 1990;162:1263.

Progression of human papillomavirus type-18-immortalized human keratinocytes to a malignant phenotype

PJ HURLIN, P KAUR, PP SMITH, N PEREZREYES, RA BLANTON, JK MCDUGALL, *Proc Nat Acad Sci USA* 1991;88:57.

Analysis of the physical state of different human papillomavirus DNAs in intraepithelial and invasive cervical neoplasm

AP CULLEN, R REID, M CAMPION, AT LORINCZ, *J Virol* 1991;65:606.

Occurrence of IgA and IgG antibodies to select peptides representing human papillomavirus type-16 among cervical cancer cases and controls

VM MANN, SL DELAO, M BRENES, LA BRINTON, JA RAWLS, M GREEN, WC REEVES, WE RAWLS, *Cancer Res* 1990;50:7815.

Targeting the E1 replication protein to the papillomavirus origin of replication by complex formation with the E2 transactivator

IJ MOHR, R CLARK, S SUN, EJ ANDROPHY, P MACPHERSON, MR BOTCHAN, *Science* 1990;250:1694.

In vitro biologic activities of the E6 and E7 genes vary among human papillomaviruses of different oncogenic potential

MS BARBOSA, WC VASS, DR LOWY, JT SCHILLER, *J Virol* 1991;65:292.

The E7 gene of human papillomavirus type-16 is sufficient for immortalization of human epithelial cells

CL HALBERT, GW DEMERS, DA GALLOWAY, *J Virol* 1991;65:473.

Rat primary embryo fibroblast cells suppress transformation by the E6 and E7 genes of human papillomavirus type-16 in somatic hybrid cells

M MIYASAKA, Y TAKAMI, H INOUE, A HAKURA, *J Virol* 1991;65:479.

Modulation of immortalizing properties of human papillomavirus type-16 E7 by P53 expression

T CROOK, C FISHER, KH VOUSDEN, *J Virol* 1991;65:505.

Inverse relationship between human papillomavirus (HPV) type-16 early gene expression and cell differentiation in nude mouse epithelial cysts and tumors induced by HPV-positive human cell lines

M DURST, FX BOSCH, D GLITZ, A SCHNEIDER, HZ HAUSEN, *J Virol* 1991;65:796.

Evolution of in vitro transformation and tumorigenesis of HPV16 and HPV18 immortalized primary cervical epithelial cells

G PECORARO, M LEE, D MORGAN, V DEFENDI, *Am J Pathol* 1991;138:1.

Cervical cytology and colposcopy

Diagnostic and treatment procedures induced by cervical cancer screening

M VANBALLEGOOIJEN, MA KOOPMANSCHAP, GJ VANOORTMARSEN, JDF HABBEMA, KTN LUBBE, HMA VANAGT, *Eur J Cancer* 1990; 26:941.

What constitutes an adequate cervical smear?—commentary

JE MACGREGOR, *Br J Obstet Gynaecol* 1991;98:6.

A randomized control trial of two cervical spatulas

CJB WOODMAN, M YATES, DR WILLIAMS, K WARD, J JORDAN, D LUESLEY, *Br J Obstet Gynaecol* 1991;98:21.

Longitudinal study of women with negative cervical smears according to endocervical status

H MITCHELL, G MEDLEY, *Lancet* 1991; 337:265.

Routine colposcopic survey of patients with squamous atypia—a method for identifying cases with false-negative smears

S CECCHINI, A IOSSA, S CIATTO, L BONARDI, M CONFORTINI, G CIPPARRONE, G TADDEI, L CIANFERONI, A SCUDERI, *Acta Cytol* 1990; 34:778.

The significance of moderate and severe inflammation on class-I Papanicolaou smear

TB LAWLEY, RB LEE, R KAPELA, *Obstet Gynecol* 1990;76:997.

Nonclassic cytologic signs of cervical condyloma—a case-control study

S CECCHINI, M CONFORTINI, G CIPPARRONE, L GALANTE, A IOSSA, S CIATTO, *Acta Cytol* 1990;34:781.

Vaginal epithelial abnormalities in patients with CIN—clinical and pathological features and management

NJ NWABINELI, JM MONAGHAN, *Br J Obstet Gynaecol* 1991;98:25.

Risk for cervical disease in HIV-infected women—New York City MMWR report

JAMA 1991;265:23.

The treatment of CIN—do we need lasers?—commentary

JA GILES, A GAFAR, *Br J Obstet Gynaecol* 1991;98:3.

Does treatment for cervical intra-epithelial neoplasia affect fertility and pregnancy?

RH HAMMOND, DK EDMONDS, *Br Med J* 1990;301:1344.

Large loop excision of the transformation zone (LLETZ) compared to carbon dioxide laser in the treatment of CIN—a superior mode of treatment

PC GUNASEKERA, JH PHIPPS, BV LEWIS, *Br J Obstet Gynaecol* 1990;97:995.

Large loop excision of the transformation zone (Editorial)

Lancet 1991;337:148.

Effective destruction of cervical intra-epithelial neoplasia (CIN)-3 at 100°C using the Semm cold coagulator—14 years experience

HK GORDON, ID DUNCAN, *Br J Obstet Gynaecol* 1991;98:14.

Plasma levels of antioxidant β -carotene and α -tocopherol in uterine cervix dysplasia and cancer

PR PALAN, MS MIKHAIL, J BASU, SL ROMNEY, *Nutrit Cancer* 1991;15:13.

Other sexually transmitted diseases

Chancroid and the role of genital ulcer disease in the spread of human retroviruses

PG JESSAMINE, AR RONALD, *Med Clin N Am* 1990;74:1417.

The nuisance sexually transmitted diseases—Molluscum contagiosum, scabies and crab lice

SA BILLSTEIN, VJ MATTALIANO, *Med Clin N Am* 1990;74:1487.

The emergence of Hepatitis B as a sexually transmitted disease

MJ ALTER, HS MARGOLIS, *Med Clin N Am* 1990;74:1529.

Public health and social aspects

A general model of sexually transmitted disease epidemiology and its implication for control

RC BRUNHAM, FA PLUMMER, *Med Clin N Am* 1990;74:1339.

Epidemiology of sexually transmitted disease—the global picture

A DESCHRYVER, A MEHEUS, *Bulletin WHO* 1990;68:639.

Behavioral relapse among homosexually active men—implications for STD control

EW HOOK, *Sex Transm Dis* 1990;17:161.

Report of the NIAID study group on integrated behavioral research for the prevention and control of sexually transmitted diseases. 1. Issues in defining behavioral risk factors and their distribution

N PADIAN, PH HITCHCOCK, RE FULLILOVE, J VOHLSTADT, R BRUNHAM, *Sex Transm Dis* 1990;17:200.

Report of the NIAID study group on integrated behavioral research for prevention and control of sexually transmitted diseases. 2. Issues in designing behavioral interventions

AA EHRHARDT, M FISHBEIN, E WASHINGTON, W SMITH, KK HOLMES, *Sex Transm Dis* 1990;17:204.

Report of the NIAID study group on the integrated behavioral research for prevention and control of sexually transmitted diseases. 3. Issues in evaluating behavioral interventions

DO ARAL, JN WASSERHEIT, SB GREEN, FN JUDSON, PF SPARLING, *Sex Transm Dis* 1990;17:208.

Trends in sexually transmitted diseases in homosexually active men in King County, Washington, 1980–1990

HH HANDSFIELD, J SCHWEBKE, *Sex Transm Dis* 1990;17:211.

Highlights from the 1989 division of STD/HIV prevention annual report

KE TOOMEY, *Sex Transm Dis* 1990;17:216.

Behavioral change in longitudinal studies—adoption of condom use by homosexual/bisexual men

JG JOSEPH, SM ADIB, JS KOOPMAN, DG OSTROW, *Am J Public Health* 1990;80:1513.

Miscellaneous

Approach to the patient with genital ulcer disease

GP SCHMID, *Med Clin N Am* 1990;74:1559.

Accuracy of clinical diagnosis of genital ulcer disease

Y DANGOR, RC BALLARD, FD EXPOSTO, G FEHLER, SD MILLER, HJ KOORNHOF, *Sex Transm Dis* 1990;17:184.

Vaginal infections in adult women

JD SOBEL, *Med Clin N Am* 1990;74:1573.

Cervicovaginal microflora and pregnancy outcome—results of a double-blind, placebo-controlled trial of erythromycin treatment

JA MCGREGOR, JI FRENCH, R RICHTER, *et al*, *Am J Obstet Gynecol* 1990;163:1580.

Natural history of recurrent urinary tract infections in women

WE STAMM, M MCKEVITT, PL ROBERTS, NJ WHITE, *Rev Infect Dis* 1991;13:77.

Sexually transmitted arthritis syndromes

A KEAT, *Med Clin N Am* 1990;74:1617.

Sexually transmitted diseases in the AIDS era

SO ARAL, KK HOLMES, *Sci Am* 1991;264:62.

The interrelationship between human immunodeficiency virus infection and other sexually transmitted diseases

GB MOSS, JK KREISS, *Med Clin N Am* 1990;74:1647.

Sexually transmitted causes of gastrointestinal symptoms in homosexual men

A ROMPALO, *Med Clin N Am* 1990;74:1633.

Male rape

MB KING, *Br Med J* 1990;301:1345.

Genital and anal conditions confused with child sexual abuse trauma

J BAYS, C JENNY, *Am J Dis Child* 1990;144:1319.

The effect of tetracycline on levels of oral contraceptives

AA MURPHY, HA ZACUR, P CHARACHE, RT BURKMAN, *Am J Obstet Gynecol* 1991;164:28.

Evolution of enzymatic mechanisms of resistance among β -lactam antibiotics

L GUTMANN, MD KITZIS, JF ACAR, *J Inter Med Res* 1990;18:D37.

The natural history of Peyronie's disease

MK GELBARD, F DOREY, K JAMES, *J Urol* 1990;144:1376.

Penile implants in the treatment of Peyronie's disease

EB EIGNER, JN KABALIN, R KESSLER, *J Urol* 1991;145:69.

Prevalence of carcinoma in situ and other histopathological abnormalities in testes from 399 men who died suddenly and unexpectedly

A GIWERCMAN, J MULLER, NE SKAKKEBAEK, *J Urol* 1991;145:77.

Histochemistry of human urethral glands

P SIRIGU, F TURNO, MT PERRA, E USAI, ESE HAFEZ, *Arch Andrology* 1991;26:43.

Reverse coitus—mechanism of urethral injury in the male partner

TP MOHAPATRA, S KUMAR, *J Urol* 1990;144:1467.

Use of the CO₂ laser in the lower genital tract

S SPUHLER, P DEGRANDI, *Arch Gynecol Obstet* 1990;247:S44.

Nodular vulvar amyloid as a presentation of systemic amyloidosis

SC TAYLOR, E BAKER, ME GROSSMAN, *J Am Acad Dermatol* 1991;24:139.

Aggressive angiomyxoma of the vulva—report of a case

K MANDAI, S MORIWAKI, M MOTOI, *Acta Pathol Japonica* 1990;40:927.

Darier's disease localized to the vulva

CM RIDLEY, CH BUCKLEY, *Br J Obstet Gynecol* 1991;98:112.